

Monitoring Health Effects of the September 11 Attack on the World Trade Center

Janet Heinrich, DrPH, RN
Director, Health Care—Public Health Issues

October 5, 2004

Objectives

- Describe the health effects that have been observed in the aftermath of the WTC attack
- Describe efforts that are in place to monitor and understand those health effects

Background

- Although people across the country were exposed to the emotional trauma of the attack on the World Trade Center, residents, responders and others in the area not only experienced the traumatic event but also were exposed to a complex mixture of potentially toxic contaminants in the air and on the ground.
- Concerns have been raised about short- and long- term physical and mental health effects of the attack.
- Various government agencies and private sector organizations established several efforts to monitor and understand the health effects resulting from the attack.

Variety of Physical Health Effects Have Been Reported in Scientific Literature

- In the immediate aftermath of the attack, thousands of people were treated for injuries, including inhalation and musculoskeletal injuries and burns.
- In addition, thousands of responders were treated for injuries during the 10-month cleanup period, although despite the dangerous nature of the work site, they reported few injuries that resulted in lost workdays.
- A range of respiratory conditions have been reported, including wheezing, shortness of breath, sinusitis, asthma, and a new syndrome called WTC cough, which consists of persistent cough accompanied by severe respiratory symptoms.

Mental Health Effects Were Observed in New York and Nationwide

- In the weeks and months after the attack, some people in the New York as well as across the country reported symptoms associated with PTSD, an often debilitating and potentially chronic disorder that can develop after experiencing or witnessing a traumatic event and includes such symptoms as intrusive memories, distressing dreams, detachment, and poor concentration.
- Other reported mental health effects include symptoms associated with depression, stress, and anxiety as well as behavioral effects such as increased use of alcohol and tobacco and difficulty coping with daily responsibilities.

Six Programs Were Established to Monitor Health Effects

Six federally-funded programs have been established by federal, state, and local government agencies and private organizations to monitor and understand the health effects of the attack.

- FDNY established its WTC Medical Monitoring Program to provide comprehensive medical evaluations to its firefighters.
- The Mount Sinai Clinical Center for Occupational and Environmental Medicine developed its WTC Worker and Volunteer Medical Monitoring Program.

Six Programs Were Established to Monitor Health Effects (cont'd)

- Through its Federal Occupational Health services, HHS initiated a WTC responder screening program for federal workers involved in WTC rescue, recovery, and cleanup activities.
 - The New York State Department of Health established a medical monitoring program for New York State responders engaged in emergency activities related to the attack.
 - Two registries were established to compile lists of exposed persons and collect information through interviews and surveys—NYC Department of Health and Mental Hygiene's WTC Health Registry and Johns Hopkins Bloomberg School of Public Health's registry of WTC site workers involved in cleanup efforts.
-

Monitoring Programs Vary in Scope

The six programs established to monitor the health effects of the WTC attack vary in terms of:

- which people are eligible to participate
- methods for collecting information about health effects
- options for treatment referral
- number of years people will be monitored

All but One of the Monitoring Programs Focus on Responders

- Five of the monitoring programs focus on various responder populations.
- The largest program—the WTC Health Registry—is open not only to responders but also to people living or attending school in the vicinity of the WTC site as well as people working or present in the vicinity on September 11.

Monitoring Methods Vary

The monitoring programs vary in their methods for identifying those who may require treatment.

- The FDNY and Mount Sinai monitoring programs offer comprehensive medical evaluations and mental health screenings as well as collect health and exposure information through questionnaires.
- Monitoring programs for federal and state WTC responders also offer medical evaluations and collect information through questionnaires, although the questionnaires for both programs are more limited than the FDNY or Mount Sinai questionnaires.
- The WTC Health Registry and Johns Hopkins registry obtain information through questionnaires and do not include a medical evaluation.

Treatment Referrals Vary

- Although none of the monitoring programs are funded to provide treatment, they provide varying options for treatment referral.
- Some programs, such as the FDNY and Mount Sinai monitoring programs, refer participants to affiliated treatment programs, whereas others, such as the WTC Health Registry, provide information on where participants can seek care.

Duration of Monitoring Programs May Not Extend Beyond 2009

- Under current plans, HHS funding for monitoring programs would not extend beyond 2009. For example,
 - The WTC Health Registry could receive funding for up to 5 years of its planned 20-year duration.
 - The FDNY and Mount Sinai were awarded 5-year grants this year to continue work that began in 2001 and 2002, respectively.
- Experts have cited the need for long-term monitoring of affected groups because some possible health effects, such as cancer, do not appear until several decades after a person has been exposed to a harmful agent.

Concluding Observations

- The full health impact of the attack is unknown, and concern about potential long-term effects on people affected by the attack remains.
- The monitoring programs may not be in operation long enough to adequately capture information about new conditions, chronic conditions, and diseases whose onset may occur decades after exposure to a harmful agent.
- Nevertheless, these programs are providing a more complete picture of the health impact of such events, and as they proceed they are also providing opportunities to identify people who need treatment.